

STORAGE
THE PRACTITIONERS' MONTHLY

DETROIT MEDICAL JOURNAL

VOL. IV.

APRIL, 1904.

NO. 1.

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ING INFLAMMATION OF RIGHT SPHENOIDAL
CAVITY;**

Emil Amberg, M. D. ;

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Frank E. Pilcher, M. D. ;

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New York Medical Journal

Jan. 9th. 1904

OBSTETRICS AND GYNECOLOGY

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New York Medical Journal

Sept. 12th, 1903



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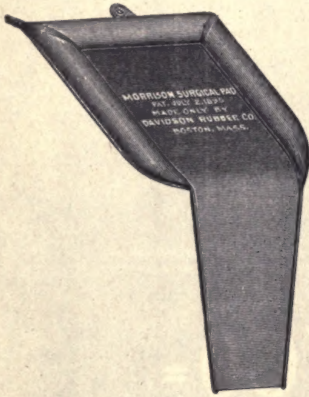
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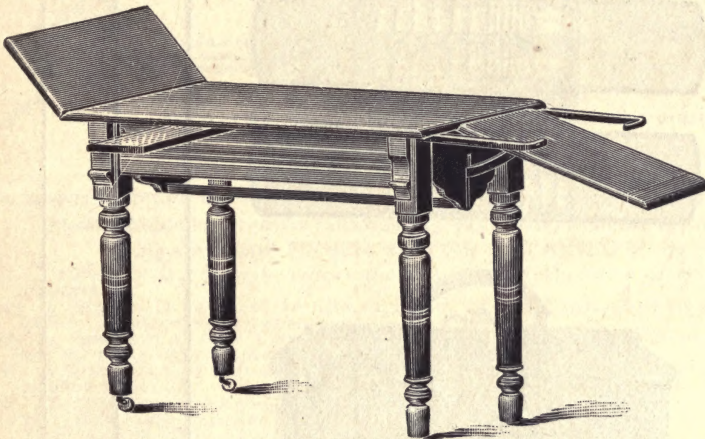
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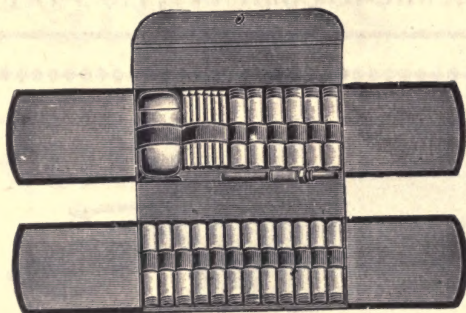
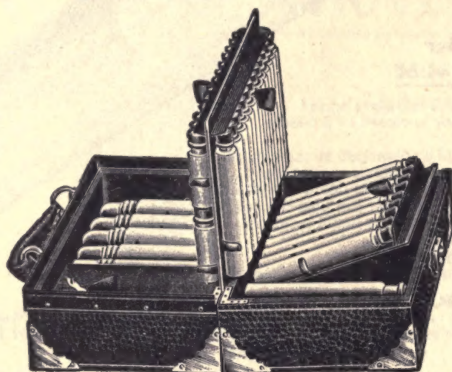
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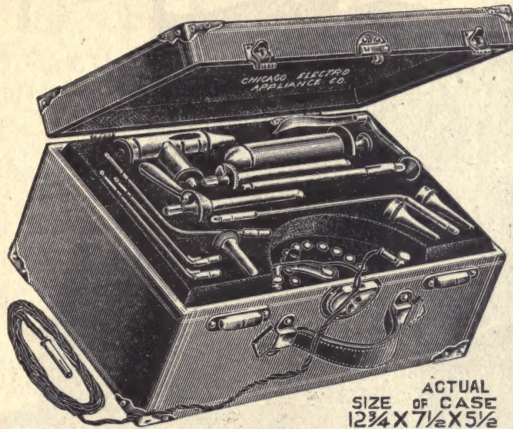
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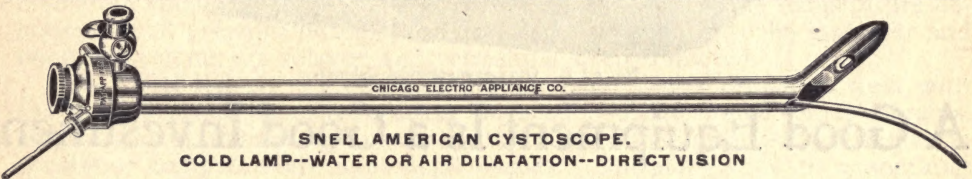
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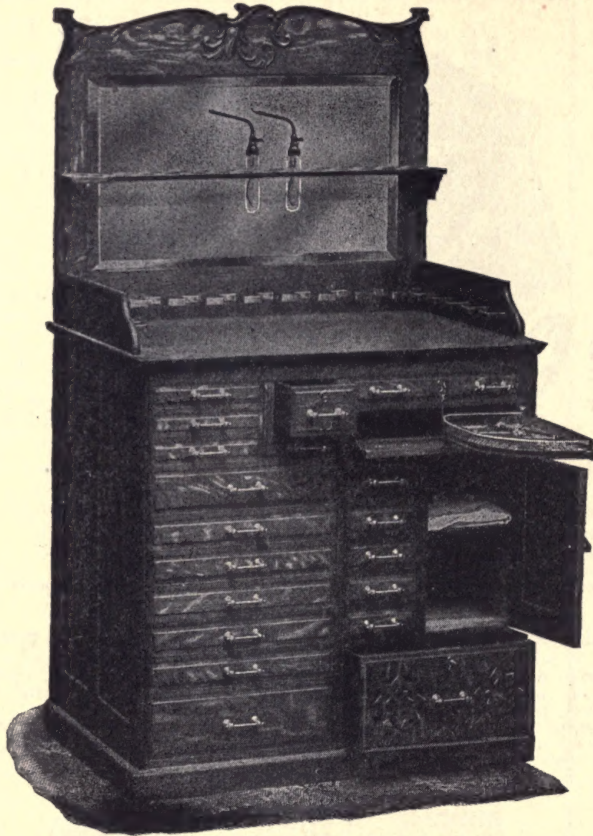
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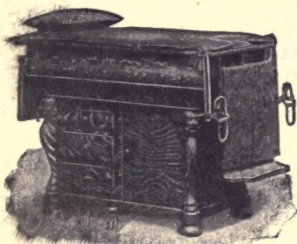
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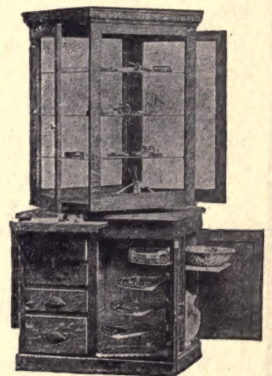
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THE DETROIT MEDICAL JOURNAL.

VOL. IV.

APRIL, 1904.

No. 1.

CANCER OF THE BREAST.*

By RICHARD R. SMITH, M. D.,
Grand Rapids, Mich.

A much greater interest has been accorded the subject of cancer during the past few years than for a long time. This has been largely due, no doubt, to the advancement of new ideas regarding its etiology—perhaps also to an apparent increase in the frequency of the disease.

Mr. Alfred Haviland, an Englishman, in his first paper in England and Wales in 1866, read before the Medical Society of London, states that in England and Wales between 1851-1860, that is, in ten years, he found 4.33 cases occurring in every 10,000 females and 1.94 cases in every 10,000 males. In a recent paper (1899) he found in the period from 1881-1890 7.3 cases in every 10,000 females and 4.31 cases in 10,000 males. That is, the number of instances in females had nearly doubled and the number in males had more than doubled in 30 years. Roswell Park, of Buffalo, who is a firm believer in the increase of cancer, in a recent paper states that in England and Wales from 1840-1890 the death-rate has increased four or five times and he makes the following startling prophecy: "If for the next ten years the relative death-rates are maintained, we shall find that in 1909 there will be more deaths from cancer than from consumption, small-pox, and typhoid fever combined." Heiman, of Berlin, states that in 1877 there were 6,971 deaths from cancer in Prussia and

in the year 1896, 17,843; an increase of 150 per cent. Of the 10,000 living in 1877 the mortality from cancer was 2.66, in 1896 it was 5.53. In still further confirmation of the opinion that cancer is increasing, may be cited the mortality record of the Mutual Life Insurance Company of New York. Statistics show that in 1879 the percentage of deaths from cancer in patients between 50 and 60 years of age was 4.23, in 1889 it was 6.22 and in 1889 7.59.

That cancer is on the increase is denied by many who have made a prolonged study of this important question. Moak states, after a study of the cancer statistics of the twelfth census, that cancer has not increased in any greater proportion than several other diseases common in adult life and old age. Newsholme also states that the increase is only apparent, not real; that a greater accuracy in diagnosis and an increased number of autopsies explain the difference.

I have recently seen the Michigan statistics of the disease. They show apparently a decided increase, not only in the actual number of cases, but in the number relative to the population as well. I regard the Michigan figures as absolutely unreliable. Before 1898 the method of obtaining them was so uncertain that one can not lay any stress upon them whatsoever. Since then (1898) physicians are required to report causes of death before a permit for burial can be

*Read before the Montcalm Medical Society January 7, 1904.

Detroit, Mich., April 15, 1904.

obtained and in time we shall undoubtedly have much better statistics; but it is still too early to deduce any accurate conclusions from the material in hand.

In determining the question one must not overlook certain facts. First, the actual increase of population; second, the lesser mortality in infancy and youth and in consequence the greater number of persons in or beyond middle life who have not succumbed to other diseases; third, the great inaccuracy of present methods of obtaining statistics; and fourth, the far greater knowledge of physicians and their care in making a diagnosis—clinically or by autopsy. If we take into consideration these facts we shall be guarded in accepting at present without reserve the opinion that cancer is on the increase.

There are today many theories in regard to the etiology of cancer and this question is at present being investigated by a number of societies in this country and abroad—societies instituted with this express purpose. We may divide these theories generally into two groups—the parasitic and non-parasitic. Of the non-parasitic theories, that of Cohnheim, one of the older ones, ascribes the growth of cancer to a misplacement of epithelial cells which takes place during foetal life, which cells later proliferate and form cancer. This would explain the hypernephromata, the growth taking place in portions of the adrenal body which have been cut off and included in the growth of the kidney, liver or pancreas. It does not show any reason, however, why these cells should remain dormant for years and suddenly begin to proliferate. Cullen states that in an examination of many specimens of the uterus he has failed to find any such inclusions which would explain uterine cancer. The theory does not explain all malignant*growths and but partially explains a few. The theory of Rippert states that the initial changes

take place not in the epithelium, but in the connective tissue underlying it. In the increase of the connective tissue, there are cut off from the overlying epithelium a certain number of cells which form nests which begin to proliferate, forming cancer. In the study of the histological structure of squamous cell cancer of the cervix, the growth has been seen to take place on the surface and to be penetrating the depths. There has been nothing found to support the theory of Rippert. Today pathologists regard the connective tissue as playing a purely passive rôle.

These two theories have been widely discussed (there are many others) all of which explain but very insufficiently the real reason for cancer development. Of late years, however, the parasitic theory has been receiving much consideration and has been gaining in believers. Bodies have been found in cancer which have been regarded by many as parasites. Numerous experiments have been inaugurated with animals with the idea of experimentally producing cancer with this parasite, but neither have undisputed cultures been made, nor have injections except with material which has contained cancer cells proven successful. We must leave the whole subject still open and unsettled, hoping that time will solve this exceedingly important question. When once the matter of etiology has been determined, we shall perhaps be in a better position to cure or avert this dread disease.

To turn, however, to the subject under discussion, namely, cancer of the breast, it will perhaps be well to speak briefly of the anatomy of this region. The mammary gland is formed of from fifteen to twenty concrete lobes which are divided into lobules. Each lobe is held together by fibrous tissues around which is deposited fat. The lobules and their acini are surrounded by connective tissue. The

entire gland is surrounded by a capsule. The circumference of the breast is not entirely symmetrical, prolongations extending in a different direction from the circumference of the gland. There are three principal prolongations—one extending downward and inward toward the sternum; the other two running respectively toward the upper and lower part of the axilla. This point is important since it makes it easy to leave more or less gland substance when operating. The breast is attached to the inferior portion of the platysma myoides and to the anterior surface of the pectoralis major muscle; also to a portion of the serratus magnus and to the external oblique. It is also attached to a certain extent to the cartilage of the ribs. The anterior convex surface is connected with the integument by fibrous bands. There are numerous lymphatics between the skin and the gland.

The blood supply of the breast is derived from the axillary and internal mammary arteries. The outer and lower portions of the gland are supplied from branches of the long thoracic, the inner and lower portion of the gland from the external mammary. The upper portion of the gland derives its blood supply from branches of the internal mammary which perforates the second and third intercostal spaces. The deep epigastric anastomosing with the internal mammary sends off several twigs to the sternal portion of the gland.

More important to us, however, than the blood supply of the breast, are the lymphatics. They are very numerous and may be roughly divided into superficial and deep. The former are cutaneous and join the deeper before extending very far. There are several groups of these lymphatic glands—the axillary, the mediastinal and the intercostal. The axillary pass outward and upward from the gland and enter the axillary ganglia.

From the axillary nodes they descend to the other ganglia between the third and fourth ribs and form a plexus around the axillary vein and, meeting below the clavicle, pass upward, entering one of the long thoracic veins. In addition to this a few superficial lymphatic vessels pass behind the axillary vessels and plexus and empty into the lymphatic ganglia of the arm, finally ascend again through nodes to empty in the same way as the other set. The sternal set of lymphatics is subdivided into two groups, one penetrating the second intercostal space and entering the mediastinum, the other penetrating the fourth intercostal space and joining the first set. Upon the right side these lymphatics anastomose with those from the liver. The deep lymphatics coming from the gland itself join the superficial group which proceeds to the axilla; those on the inner surface enter the mediastinum along with the superficial ones. Another set of lymphatics accompanies the intercostal vessels and later enter the thoracic duct.

The surgical anatomy of the axillary space should be well understood, for one is enabled to do a much quicker and more thorough dissection if he is not obliged to feel his way. The axilla is bordered on the inner side by the thoracic wall, on the outer by the arm, posteriorly by the latissimus dorsi muscle, anteriorly by the pectoralis major and minor. The large vessels and nerves run along the outer aspect of the axilla hugging the inner side of the arm. These excepted, there are no nerves of great importance. The nerves and vessels which run through and among the mass of fat and glands should be boldly cut, if necessary. The subscapular vessels and nerves run downward along the anterior surface of the latissimus dorsi but can be easily avoided. So much for the anatomy.

Until within the last twenty-five years operations for carcinoma of the breast

were attempted simply with the idea of postponing the inevitable result. Practically every case was an absolute failure as far as curing the disease went. Charles H. Moore in 1866 was the first to point out the importance of removing together with the diseased breast the tissue adjoining the breast which even approached the area of diseased tissue, especially skin, lymphatics, fat and pectoral muscle. This was the first step of the advance which has since been made with the operation. In 1877 Banks, an English surgeon, published a paper in which he taught that in any breast in which there was appreciable cancerous disease, the axillary lymph glands were to be regarded as involved and that the fatty and glandular contents of the axilla should be cleared out whether enlarged glands could be palpated or not. Volkmann and Küster, German surgeons, in 1882 and 1883 added to this the practice of dissecting from the surface of the pectoralis major muscle the fascia which covers it. In the United States the younger Gross particularly emphasized the importance of wide extirpation. In 1889 Heidenhain demonstrated the impossibility of removing the fascia without leaving disease behind and suggested the removal of the pectoralis major muscle. In 1894 Halstead published the unusually favorable results which had been secured at Johns Hopkins Hospital by the careful and thorough carrying out of the work of his predecessors. He added also special features of his own, namely the more frequent invasion of the region above the clavicle and a freer removal of the skin about the breast. Since then surgeons have removed a wide area of skin surrounding the breast, all of the breast tissue itself, pectoralis major and minor, the axillary fat and glands, and in many instances the space above the clavicle has been invaded and cleared.

In regard to recurrence following the

complete operation, Dr. Halstead before the American Surgical Association in 1901 states that of 129 cases of operation 51 have been cured, that is, I presume, had gone beyond the three-year limit. Shield reports that of 40 cases 8 remained well after five years, 4 for four years, 7 for three years and 11 for two years; in all 30 cases beyond two years. A summary of the analysis of 100 cases by Mc Williams gives 24 per cent. cured, that is, no recurrence after three years. Warren thinks that if examination shows no recurrence within three years the cure may be regarded as certain and says that taking the average results of the present time we are safe in assuming that a cure can be affected in at least 30 per cent. of the cases operated upon. Vischer reports that of the 56 cases of removal occurring in private practice, of which he had a complete record, only about two-thirds had recovered. Labhardt gives a table of cases of operations upon the mammary gland for cancer, showing that in 2,107, 48 or 2.3 per cent. showed late recurrence, that is to say, after the fourth year.

The operation here described is the one which has been adopted by those who attempt the complete operation, namely, the Halstead operation. An oval incision extending from two inches beyond the point of the shoulder on the arm parallel with the clavicle, then passing downward nearly to the median line, surrounding the breast to a point well below it; another oval incision from this point outward around the breast and meeting the first incision at a point about three inches from its beginning. The incision extends through the skin and fat to the firm fascia underneath. After catching, and when necessary tying, the vessels which run close to the skin, the upper incision is then deepened so as to include the pectoralis major muscle close to its inner edge. This muscle is pulled back, together with all of the breast tissue, from

the ribs. The branches of the internal mammary which come out between the second, third, and fourth ribs should be caught if possible some little distance away from their point of exit in order to prevent the troublesome bleeding which follows if the arteries are torn away and retreat within the intercostal spaces. If a part of the pectoralis major is to be left (the clavicular portion) it is next split at the junction of the two portions the whole length of the incision. The pectoralis minor is next loosened from its attachment to the ribs and this is best done by passing the finger underneath its lower border. In this way a clean denudation of the ribs and chest wall is brought about. All bleeding points should be caught and the large area covered with a hot towel. The separation of the pectoralis minor from its attachment to the coracoid process is the next step. The axillary vessels run close to this point and great care must be exercised not to injure them while cutting away the muscle. The acromio-thoracic, a branch of considerable size of the axillary, runs close to the under side of the muscle and should be caught and tied. The whole

axilla is now freely exposed and can be readily cleared. One should seek first the axillary vein and expose it for its entire length. With the fingers all the fat and its glands should be removed from the axilla. If nerves or small vessels pass through the mass they should be severed. After clearing the axillary fat the chain of lymphatics running down the side of the thorax should be removed. Beneath the clavicular portion of the pectoralis major is a mass of fat which sometimes contains glands and this also should be removed. Lastly the pectoralis major together with the axillary fat is cut away from its attachment to the humerus. A counter opening is made low in the axilla for drainage, it being best to bring the arm to the side before determining this point. The incision is then closed with silk-worm gut, relaxation sutures being as a rule necessary. If it is not possible to bring the skin together, as much as possible should be covered without undue tension and the wound be allowed to granulate. Skin grafting should be employed at the end of a week or two if it is thought advisable.

Wonderly Bldg.

Suit was recently brought before the second appellate division of the Supreme Court of New York by a parent to compel the admission of his child to a public school without having the child first vaccinated. The allegation was made that the statute requiring vaccination, passed by the Legislature, was at variance with the state constitution, which provided for the maintenance and support of a system of free common schools in which children might be educated. The court handed down a decision to the effect that the Legislature had a right to make reasonable conditions, upon which education might be enjoyed; and that the body had a right to regulate the privilege in

the interests of the fullest enjoyment by all. It was added that the courts could not remedy existing conditions, held by the plaintiff to be wrong; that the Legislature must itself apply the remedy; and that no specific guaranty had been violated by the statute.

It is reported that there are more than 200 cases of typhoid fever in Minneapolis, and that the number is steadily increasing.

The epidemic is decreasing in Cleveland, but 54 new cases being reported for the week ending March 19, with 19 deaths in that time.

OPERATION FOR ADENOIDS

By P. M. HICKEY, A. B., M. D.,
Detroit, Mich.

There is no operation, especially among those performed on the upper air passages, in which the results are so gratifying and the relief afforded so immediate as in the operation for the removal of adenoids. It is perhaps unfortunate that the term "adenoids," which universal usage has accepted as correct, should not be replaced by the correct term "lymphatic hypertrophy." The accompanying cut (see fig. 1) illustrates the micro-

flammatory process. In Fig. 2, which is a photomicrograph of a section through one of these folds, is seen an inflammatory exudate deposited on the epithelium of the mucosa and leucocytes in the process of emigration between the columnar epithelium. This specimen was removed from a young adult who at the time of operation was not complaining especially of any symptoms of acute coryza.

In considering the technique of this operation, it will be advisable to dwell



Fig. 1. Section through lymphoid hypertrophy of the nasopharynx.

scopic appearance of this tissue. The mucous membrane, the lymph nodes and the inter-nodular stroma are well shown.

Children and many adults whose respiratory passages are obstructed by this over-growth of tissue have a marked tendency to attacks of acute coryza. If we regard acute coryza as dependent not only upon circulatory disturbance but also as a manifestation of a mild type of infection, we may seek the explanation in the fact that in the folds of these adenoids there is constantly a sub-acute in-



Fig. 2. Section showing inflammatory exudate in a fold in the lymphoid hypertrophy.

for a moment upon the choice of an anæsthetic. In very young children, when it may not be deemed advisable to employ a general anæsthetic, the use of the intubation position may be advantageous. The child is swathed in a stout sheet, well pinned so that the arms are confined to the sides, and is held in the lap of an assistant. The operator may then perform a very rapid operation with the curette, and while this procedure may seem somewhat crude, it certainly has its

advantages when dealing with very young children. With older children many operators make use of ether on account of its supposed greater safety. The disadvantages of ether are: the length of time it takes to properly anæsthetize the patient and the alleged tendency to subsequent bleeding. Chloroform is preferred by many experienced operators, particularly in the West, on account of the short period of administration. However, sudden deaths and many anæsthetic accidents, which have proven almost fatal, are recorded, even where the administration was conducted by an experienced anæsthetist. The use of ethyl chloride is often recommended as giving a very prompt, complete and short anæsthesia without danger. It is to be regarded as much safer, although somewhat more expensive, than chloroform. In adults the local use of cocaine is commonly recommended, but it has been my personal experience that even after thorough cocaineization of the naso-pharynx, adenoids are removed with considerable pain on the part of the patient and with a struggling which often prevents a thorough operation. In the opinion of the writer, the use of nitrous oxide as a general anæsthetic offers many advantages. It is a safe and cheap anæsthetic and one from which the patient recovers with very little subsequent discomfort. It has been urged against its use that the period of anæsthesia is very short. The ordinary time which it affords is from one minute to a minute and a half. This time has given the writer ample opportunity for the removal of not only both tonsils but also the adenoids, and time for a thorough digital examination of the naso-pharynx. If there is combined with the nitrous oxide about one min. of chloroform to the gallon of gas used, the anæsthesia will be deeper and cyanosis less marked.

One advantage of the use of nitrous oxide is that it allows the patient to be seated upright in a chair during the period of operation. This is a great advantage in rapid work upon the pharynx, as it facilitates the removal of blood from the throat, so that the field of operation is not obscured. Many operators, when operating upon children under chloroform, raise the patient to a sitting position, but such a procedure can only be condemned as it is attended with great danger of a fatal collapse. If ether or chloroform is selected for the anæsthesia, the patient can be placed upon his back with the head lower than the shoulders so that the blood will tend to run out through the nostrils. Another position, which is less often advocated, is to have the patient lie on a high table upon his chest and then have an assistant raise the head, while the operator is seated on a very low stool below the patient. The disadvantages of this are that the operator is in a somewhat cramped attitude and the difficulties of properly illuminating the pharynx are much greater.

There are many operators who consider that the simple insertion of the finger into the naso-pharynx and the scraping of the lymphoid mass with an elongated finger nail is sufficient to relieve the patient. While such a procedure may be all that is necessary in certain cases in which the obstructing material is slight in amount and soft in consistency, yet it can not be advocated as a routine line of treatment. Many cases have considerable fibrous tissue in the lymphoid structure and the use of an instrument as blunt as a finger nail is not sufficient for their removal. It is also doubtful if we can so thoroughly cleanse the finger nail and the integument about the nail that we avoid the danger of infection to the patient.

Many operators recommend the use of forceps and a number of types of vary-

ing sizes and shapes have been devised. However, these have a limited field of usefulness. The removal of the tissue with forceps should always be guided by the finger in the naso-pharynx to avoid the removal of tissue which should not be touched. If the forceps are not guided by the sense of touch the operator may very easily grasp the posterior end of the vomer, the posterior edges of the inferior turbinates, or, what is attended with more disastrous consequences, the tissue about the orifice of the Eustachian tubes. Such accidents as these have happened to inexperienced operators.

Probably the safest instrument to use is the curette, but nearly every one who practices this operation has his favorite instrument. A point which I would like to emphasize in the selection of a curette is that the type selected should be adapted to the individual case. This may perhaps seem a trite saying, but experience has shown that with a small curette it is difficult to remove all the superfluous lymphoid tissue in the patient whose nasopharynx is large. The size of the curette should be such that the cutting edge of the instrument is as wide as the lymphoid tissue. This permits of the removal of the growth *en masse*, secures a clean cut of the tissues and vessels, and allows the patient or parents to see the specimen in its entirety. The use of the curette facilitates a quick operation, inasmuch as it allows of more rapid movement on the part of the surgeon. After the bulk of the hypertrophy has been removed, a small curette of right-angled shape may be used to remove from the posterior wall of the pharynx any shreds of tissue which are left or any very large follicles. The finger should be inserted into the nasopharynx and a careful digital examination should be made with special reference to any obstruction to the

edges of the orifice of the Eustachian tube. These, if small, may be removed by the finger as soon as felt. The operation should not be considered as ended and complete unless the naso-pharynx is well cleared. The operator should not scrape away part of the tissues and trust to the absorptive powers of nature to complete the operation.

The hæmorrhage after an adenotomy is not usually severe, although it may be profuse for a few minutes. If any alarm is felt, a piece of cotton may be carried on the finger into the naso-pharynx and firmly pressed against the vault. This will usually control the flow of blood, so that it may be removed after two or three minutes. If desired, the cotton may be saturated with a strong solution of alum, peroxide, adrenalin hydrochloride or persulphate of iron. This last substance should not be used, on account of its escharotic effect, until other means have been tried. While one should always be prepared to combat with such an emergency, yet serious hæmorrhage after adenotomy is of very rare occurrence.

The use of sprays or douches after the operation is often simply a source of annoyance and their routine employment is not to be advocated. Small pieces of ice held in the back part of the mouth are often very agreeable and serve to diminish the danger of post operative hæmorrhage.

In children with a very high arch to the hard palate, even a thorough removal of the adenoids may be ineffectual in restoring nasal respiration. Such cases should be referred to specialists in orthodontia. The results of these two lines of treatment will effect a cure in what have been regarded as recurrent adenoids where the operator has often been censured for incomplete removal.

TEMPORARY UNILATERAL DEAFNESS, ACCOMPANYING AN INFLAMMATION OF THE RIGHT SPHENOIDAL CAVITY.*

By EMIL AMBERG, M. D.,
Detroit, Mich.

The patient, upon request, wrote the following history of her affection about two months after the beginning of her affliction. Slightly changed, it reads:

"August 13, 1903. Went to a party the night before the morning I was suddenly taken ill with chills and fever; no headache, but pain on top of head and back of ear. Towards evening, I was put to bed, and given a hot foot-bath and a whiskey-sling. My own physician was called. He said I had a bad cold in the head, and treated me for several days. At midnight one of these nights I was delirious with the fever, which kept growing worse. Did not know anything for hours. It took two to hold me in bed; seemed as if I was falling. I had been taking quinine and other medicine. None seemed to allay the fever or the pain at the top of the head, which rapidly spread to the right side of the head, back of the ear, causing a disagreeable singing sensation, thus making my hearing difficult.

"Another doctor was called in. He agreed with my physician that it was a case of neuralgia, and painted parts back of the ear. A different set of medicines was advised, which seemed to do me no good. The fever and pains in the head were almost unbearable. I became troubled with pains in the bowels and diarrhoea; red spots also appeared on the abdomen. I became very much distressed and could not sleep. The fever seemed to rage worse than ever. The physician then advised consulting a specialist, who examined the head thoroughly. Ice-bags were placed on top of my head, which relieved me a little. The doctor ordered a spray to be used, but I could not stand having it used, it weakened me so. Then a douche for the head brought great relief. (After the 23th.)

"After using this douche, the head began to discharge, thus allaying the pain and high fever somewhat. The pains were at first of a dull, aching nature, finally developing into sharp, shooting ones. They were always more severe from about 3 o'clock on, and during the evening. The head discharged for several weeks, and though this is the eighth week, the douche is still being used, as it seems to clear my head. At no time was this discharge offensive. My eyes were very weak and the light hurt them, so I was kept in a dark room most of the time. I was still burning with fever, and the pain remained with it when the doctors

SYNOPSIS OF ILLNESS.

First Symptoms: Chills and Fever. Delirious. Pain in bowels; diarrhoea; long period of menstruation (strong odor; blood clotted); loss of appetite; very bad odor to breath; high fever;

*Read before the Eye, Ear, Nose and Throat Section of the Wayne County Medical Society, February 29, 1904.

considered my removal to the hospital for an operation.

severe pains in knees; appearance of red spots on abdomen. Loss of sleep. Considerable thirst.

Second Symptoms: Very high fever. Pains at top of head.

Eyes very weak, unable to stand light; pains continue in head throughout illness: first top of head; second, back of ear.

Temperature high; pain in head reaches climax; unable to stand use of spray; great relief from use of douche, although very weakening and exhausting. Discharge from head; hot flashes through body."

On August 20, 1901, I was called to see Miss J. K., aged about 23 years. I was told that there existed a suspicion of a complication of a middle-ear disease of a very painful character. Patient gave me the impression of being very sick. Hearing in right ear was almost totally gone. The right drum membrane presented a moist appearance, but no exudate was visible to the author. Symptoms of any affection of the lateral sinus, an extra-dural abscess or septic meningitis were not present. Roaring and buzzing noises in head were complained of.

The suspicion was entertained that there might possibly be a retropharyngeal abscess, but digital examination proved that such was not the case. Patient improved somewhat, so that I did not see her from August 21 to August 28, at which date I was again called by the attending physician. It appeared to me then that the patient was suffering from septicaemia caused by an inflammation of the sphenoidal cells, probably the right one. The diagnosis was based on the following symptoms:

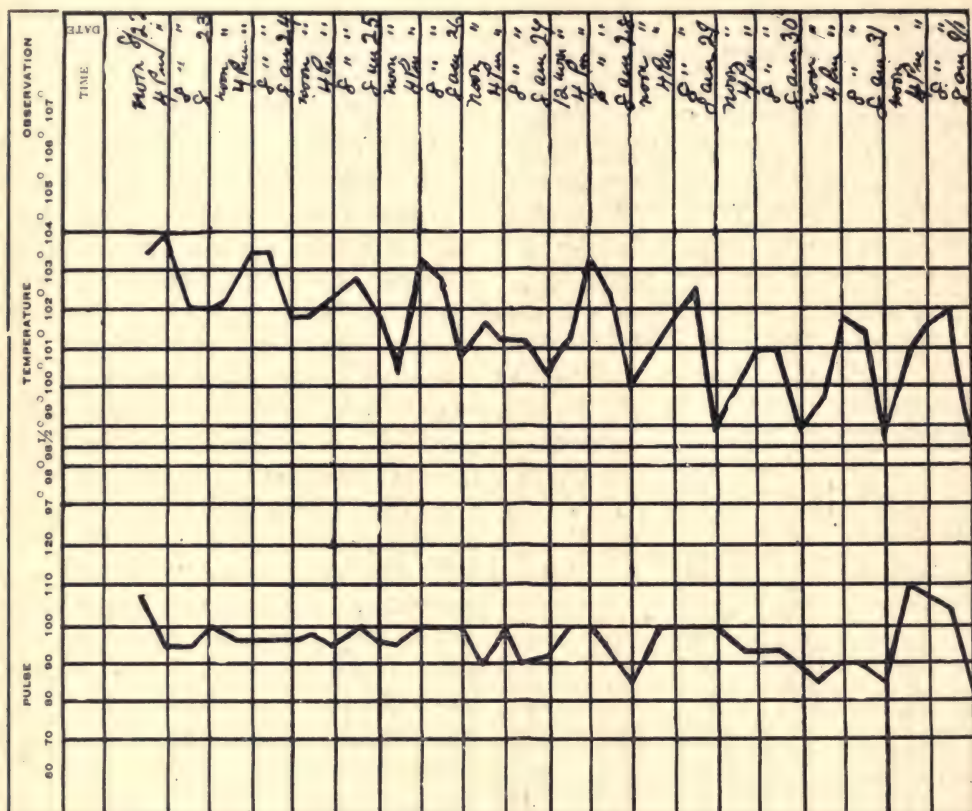
1. Absence of a general disease, although general condition resembled a typhoid or septic state.
2. Character of fever.
3. Sensation that something was always dropping down her throat.

4. Pain on top of head.
5. Pain in region behind right ear.
5. Feeling of rough bone while probing at entrance of right sphenoidal cavity.
7. Result of therapeutic efforts.
8. Photophobia.

The accompanying chart, from August 22 to September 1, indicates the severity of the attack.

of this kind can easily be seen by comparing our case with similar, though not identical, cases, on record.

In the *Archives of Otolaryngology*, Vol. XXXI, No. 6, 1902, Dr. Harold Wilson, of Detroit, reports a very instructive case of multiple sinus thrombosis, cerebellar abscess and meningitis, probably originating from an osteomyelitis of the



Upon seeing the patient on August 28, it appeared to me that we should not wait any longer without opening the sphenoidal cavity, and I called Dr. Miner in consultation. Dr. Miner confirmed my diagnosis, suggesting also the presence of ethmoiditis. The condition of the patient, however, was so much better objectively and subjectively on the 29th that we decided to abstain from operative interference. The patient recovered and gained steadily. The obscurity of cases

sphenoid. The diagnosis was confirmed by the autopsy. The patient was operated upon three times. The first operation consisted in opening the left mastoid antrum. Unduly free bleeding. The second operation revealed pus in the lateral sinus. The third consisted in opening the right lateral sinus, without finding pus. This case shows how difficult the correct diagnosis of these conditions is.

In the *Archives of Otolaryngology*, Vol. XXXI,

No. 6, Dr. C. E. Finlay, of Havana, Cuba, describes a case of thrombophlebitis of the cavernous sinus, complicating an empyema of the sphenoidal sinuses and ethmoidal cells, mistaken for a thrombophlebitis of the lateral sinus. The autopsy showed the cavernous and circular sinuses occupied by a purulent clot and the sphenoidal and posterior ethmoidal cells occupied by thick, yellow, fetid pus. He reports further that investigation into the previous history of the patient showed that there was no evidence of former nose trouble. Dr. Finlay says: "The autopsy showed, without a doubt, that the middle ear trouble was secondary to the nose trouble, and in no way responsible primarily or secondarily for the symptoms which preceded the fatal termination of the case.

"Another important lesson is that empyema of the sphenothmoidal cells may exist, and even bring about death, with no noticeable outward manifestations."

In our case there existed, in my opinion, only a slight inflammation of the middle ear, which I should not like to call secondary, but an affection originating from the same source, namely, from an inflammation of the mucous membrane of the upper respiratory tract, extending to the neighboring cavities. The ear affection stood first, inasmuch as popular symptoms were not in evidence. It would seem advisable to analyze the symptom, called collectively "headache," which is usually given as one of the symptoms of middle-ear trouble, and not to regard it as a unit-symptom. It is a complex symptom. If it could be analyzed successfully in all cases, we should probably come to the conclusion that it indicates the more or less serious affection of one cavity or the other, besides

the middle-ear cavity, and, furthermore, it would furnish us with an explanation for a remaining rise in temperature when the middle-ear condition will not furnish us with a plausible cause for the same. The grippe epidemic with its complications furnishes ample illustrations.

In regard to the deafness, Gruenwald (*Die Lehre von den Naseneiterungen*, Muenchen, 1896), says: "We have, however, no explanation for the deafness on the same side (see Rouge) because we have no report as to the condition of the ear." So far as the appearance of the membrana tympani in our case was concerned, I noticed that it appeared moist, but not bulging. Nor did I detect any exudate. Nevertheless, I should be inclined to call the process in the middle-ear an acute serous otitis media, which, however, cannot explain to me the great degree of deafness.

The presence of neuritis optica is reported in cases of affection of the sphenoidal sinus (cf. Gruenwald).

That the deafness was caused by a neuritis of the acoustic nerve accompanying a serous meningitis, which neuritis may have consisted of a hyperæmia with serous moistening and leucocytosis (See Blau, *Encyklopædie der Ohrenheilkunde*, 1900, page 9) can be regarded as a great probability.

There did not exist a facial paralysis. While the process in the right sphenoidal sinus was apparently of a suppurative character, the meningeal affection was probably of a serous nature.

Miss K. called at my office February 25 and said that she felt free from any complaint and that she had been gaining in health ever since she began to convalesce.

ADHESIONS.*

By FRANK E. PILCHER, M. D., Detroit, Mich.

We are taught that adhesions are the product or result of inflammation: A German physician of some prominence makes the statement that "the effusion of blood into the peritoneum, without symptoms during menstruation, is the cause of adhesions."

Dr. Vogel, in the *Annals of Surgery*, says: "The quietude of the intestines favors to a great extent the formation of adhesions." It is also, I believe, generally accepted that the conditions which give rise to adhesions usually cause more or less thickening of the peritoneum.

While I do not question any of the foregoing theories, it seems to me there are many additional causes for the formation of adhesions, of some of which we are perhaps ignorant, and many causes which possibly we do not understand.

The literature upon this subject appears to me, at least, to be rather meagre and consequently any information which will create thought for discussion and investigation should be most acceptable.

In presenting the following case for discussion, I have no new theories to promulgate, and no explanation to make as to the cause of the conditions found. On the contrary, I am seeking for light, and trust that some satisfactory explanation may be given as to how this disease originated and why it continued and developed. The case is so decidedly out of the ordinary and so interesting, that you will pardon me if I go somewhat into detail regarding it, especially as it seems, to controvert, at least in a measure, our theories as to the formation of adhesions.

I was informed that some twenty physicians had preceded me, each one failing to give relief, but all agreeing as to the

disease. From the husband and nurses I obtained the information that all the physicians had said most emphatically that Mrs. B. was the victim of pulmonary tuberculosis. She had been confined to her bed for the greater part of two years, sitting up for only a short time each day, and for the eight months preceeding the time I first saw her she had been unable to enjoy even this change, and at no time was she strong enough to walk or stand. Entering the sick room, I saw that the patient was extremely emaciated, literally nothing but skin and bone, a mere skeleton, the thinnest individual I had ever seen. Cough was well-nigh constant, blood was often mixed with the sputum, which was abundant and frothy, but at times thick and tenacious. Breathing was labored, shallow and irregular; skin dry, very dark and leathery; hair coarse and lifeless. These were things which I noticed before making any attempt at examination. My plan was first to obtain a complete history of the case, which was as follows:

Her age was 32. Had been married 12 years, the mother of one child, a boy now 10 years old, strong and healthy. Both her parents living and in good health. During her childhood was as healthy, and strong as the average child. When sick, however, the disease seemed more severe with her than with others of the same age and conditions of life. Never had scarlet fever nor diphtheria. Had measles at the age of 12, but the disease manifested itself by many strange symptoms; the rash was not quite typical of the trouble; Dr. Howard, of Tekonsha, who attended her, was somewhat puzzled before being able to make a positive diagnosis; convalescence was prolonged, but uninterrupted. In her 15th

*Read before the surgical section of the Wayne County Medical Society.

year was badly poisoned by ivy, at which time she suffered greatly. From the effects of this poisoning she seemed never to fully recover. There were frequent evidence of its recurrence; if she put her hands in hot water, as would occur in the ordinary duties of housekeeping, a very red, painful and intensely itching rash would appear, to subside after a few days of suffering and constant treatment.

Had been constipated, from her earliest remembrance, frequently going a week with no movement of the bowels. Headaches were of common occurrence; tongue usually coated; lips dry and cracked. All these symptoms would be temporarily relieved by the use of cathartics. Was very easily fatigued, and would be completely exhausted following any excitement or unusual exertion. Menses had from the first been irregular; suffered greatly at each monthly period. At times her suffering was so intense it was necessary to keep her well under the influence of morphine or chloroform. The flow when established was about normal in amount and color.

During her pregnancy nothing out of the ordinary occurred. Labor was somewhat protracted, but terminated normally. Milk leg followed, which kept her in bed three months. Recovery was somewhat interrupted but the disease was without complications. After this she seemed as well as usual.

Six years ago she was confined to her bed 10 weeks, with what was pronounced malarial fever; during three weeks of this sickness she was in a comatose condition, from which she could not be aroused. The bowels were badly constipated. Such movements as she had were produced only after strong medication given in large doses. The stools were black, dry and hard.

This condition of the bowels remained up to the time I first saw her, three years

ago, or in 1900, the beginning of the trouble now under discussion; she had what seemed to be rheumatism, there was more or less fever and some swelling of the joints. The swelling was red and painful. It would, however, leave the joints soon, to come on the back of the hand or in the center of the forehead, where it would remain for an hour or so, going away quickly only to appear at some other point. None of the many rheumatic treatments seemed to help her in the least and from this condition she had not recovered at the time of my taking charge of the case. The throat had for some years been very tender, often so irritated as to make swallowing difficult. Obnoxious odors caused symptoms of strangulation so severe as to necessitate the calling of a physician.

For the three years before I saw her she had been in bed most of the time, always under the care of a physician, and with trained nurses in constant attendance. She had many attacks of neuralgia and what she designated as pleurisy, although I could get no satisfactory history of such a condition and examination revealed none. From what I could learn, she had never had fluid in the thorax or abdomen. In March, 1901, she was attacked suddenly with a severe pain of a spasmodic nature in the pit of the stomach, accompanied with hiccough of a very persistent type; this hiccough had continued to a greater or less extent since. Through the kindness of Dr. Flemming, who was in attendance at the time of my first visit, I am enabled to quote from charts kept during his management of the case:

From March 15 to April 1, 1901.

Temperature was 99 degrees to 101.

Pulse 102 to 105. Respiration 18 to 20. Shallow.

April 1 to May 1.

Temperature 100 to 102. Pulse 100 to 140, irregular.

Respiration 20 to 40, labored.

May 1 to June 1.

Temperature 98 to 101. Pulse 90 to 140, feeble.

Respiration 20 to 40, shallow.

June 1 to July 1.

Temperature 98 to 102. Pulse 100 to 135, feeble.

Respiration 22 to 42, shallow.

July 1 to August 1.

Temperature 98 to 101. Pulse 110 to 130, irregular and feeble.

Respiration 20 to 45, shallow.

August 1 to September 1.

Temperature 98 to 101. Pulse 102 to 134, very feeble.

Respiration 20 to 30, labored, shallow.

September 1 to October 1, 1901.

Temperature 97 to 100. Pulse 100 to 135, very feeble.

Respiration 20 to 32.

The case came into my hands October 3, 1901, at which time I found the following condition:

Patient extremely emaciated, a mere skeleton, skin dark, dry and leathery; hair coarse, brittle and lifeless; lips cracked and bleeding; tongue dry, deeply furrowed and covered with a thick, yellowish coating; throat very much inflamed and tender; a large red hard swelling in the middle of the forehead, which looked much like a boil. In the course of a few hours this would entirely disappear from the forehead and reappear on the back of the hand, only to return to the forehead. Small abscesses had formed around the base of each finger nail.

Temperature, 101. Pulse, 145, irregular and very weak. Respiration 40, shallow and labored. Cough constant, and much thick, yellowish sputum, streaked with blood, was raised. Pain at various places over the body, but especially bad at base of left lung. Extremely nervous, fretful and peevish. Slept very little, not more than three hours out of the 24, and

then not longer than 30 minutes at a time. Percussion over left lung gave dull sound, lower part of right lung gave the same dull, flat sound. Auscultation gave sound as of large cavities filled with thick fluid. Liver about normal, but tender.

Stomach distended, much enlarged and gave sensation of having very thick walls. Palpation over the region of the stomach caused much pain and an increase of cough. No tenderness nor distension over bowels. Ovaries seemed about normal. Uterus small, contracted but not painful. Bladder somewhat sensitive. Appetite ravenous. Bowels badly constipated. From the charts I learned that medication had been extensive and variable. From examination and appearances it seemed as though my predecessors had left little for me to do. Specialists had said she could live but a very few days, and I was quite inclined to agree with them. However, I had been called to do something and the family seemed to look to me for help at the moment when the patient was beyond human aid.

Convinced there could be no harm in making the effort, I proceeded. After a careful consideration of the conditions, of the history and my examination, the conclusion was reached that the stomach was the chief cause of this woman's suffering. Eliminating the possibility of its being cancerous, I had no hesitancy in pronouncing the case one of cirrhosis of the stomach. My plan of treatment first carried out was the discontinuance of all drugs, the cutting off of all foods, which, by the way, had been given her in great variety and unlimited quantities. My idea was to place the patient upon the most simple treatment possible. Water was to be used freely. I first gave small quantities of distilled water every two hours and slowly and gradually increased this until she was taking 8 ounces every

two hours. After five days of nothing but water, I gave small quantities of malted milk every four hours and a week later Peanut butter was added. These, with the distilled water, were the only articles of diet taken for the first five weeks.

The plain warm water enema was employed from the first, using for this purpose from 6 to 10 quarts night and morning. The patient retained as much as possible before allowing it to pass out and repeated the process until the full amount had been used. Each time water brought away a considerable quantity of black, hardened feces, often so dark and hard as to resemble hardened clay. After some weeks of these bowel injections there came in addition to the hardened feces, much thick, white, slimy material; this latter came in increasing quantities until it was no uncommon thing to get three-fourths of a pint twice daily. Now, after five weeks, the patient had improved sufficiently to sit up in bed three hours each day. The skin was much clearer, the tongue comparatively clean. Temperature and pulse had been normal for four weeks, sleep was good and the swelling on the forehead had entirely disappeared. Respiration was full, deep and easy. In fact every symptom was for improvement. In addition to the other things mentioned, we added the bath cabinet. The diet was increased by the addition of fruit, figs and nuts. Improvement was continuous. About the middle of December, or ten weeks from the time of my first visit, she was able to walk about her room. December 25 she went down stairs for the first time, but with some help. By the last of January she could go up and down stairs twice daily, unaided, and even went for short walks out of doors. Weight had increased to 130 pounds. The only remaining symptom of her former trouble was the epigastric pain, which was the cause of

much suffering. As she exercised more and ate more the pain increased in severity. It would come so strongly and suddenly as to cause her to sink upon the floor. After a few moments it would go away as suddenly as it came, leaving the patient apparently no worse for its visit. In some respects it resembled neuralgia. Nothing, however, seemed to relieve it and her suffering was intense. This was the only thing which barred her way to complete and perfect recovery. To my mind, the cause of this pain was plainly adhesions about the stomach, although I could not account for any active inflammation as a starting point. A Southern trip was advised, believing that in a climate where she could be out of doors most of the time and have the benefit of exercise and sea-air an improvement would gradually take place. After an absence of four weeks she returned to Detroit certainly no better, and in some respects not so well as when she left. The physicians whom she consulted during this trip all gave it as their opinion that miliary tuberculosis was the trouble. After a day or two at home she was extremely anxious that something should be done to give her relief, and that speedily. Two plans were suggested. One the consultation and treatment by a specialist, the other that I be allowed to make an operation with the hope of breaking up the adhesions and thus relieving her suffering. The first plan was tried, but no improvement followed, consequently she was removed to the hospital June 3, the operation, which was to be an explorative one, being made the following day.

An incision was made from the end of the ensiform cartilage about 2 inches long in the median line and afterward increased to $3\frac{1}{2}$ inches. The stomach was found strongly adherent and immovable; after the most careful labor and painstaking dissection it was brought out

of the cavity. The size was about normal. The walls were somewhat thickened and evidences of adhesions were everywhere present. I opened the stomach on the anterior surface by an incision about $1\frac{1}{2}$ inches long; nothing was revealed by this procedure; the lining of the organ was perfectly healthy. The walls were carefully brought together and closed by two rows of sutures, the first through all the coats and the second through the serous coats alone, cat-gut being used. The surface of the stomach was washed off with normal salt solution, after which the cavity was irrigated with the same, a quart of saline being allowed to remain in the cavity with the idea of preventing the re-formation of adhesions. The abdominal wound was closed in the usual manner. The improvement was marked, all symptoms having subsided. At the end of 10 days the superficial sutures were removed and at the end of three weeks, she was allowed to sit up, so it seemed once again that her suffering was to give way to perfect health. Temperature and pulse were at no time above normal. There had been no vomiting and no return of the epigastric pain. The improvement was highly satisfactory. The diet after two weeks was unrestricted. As she was very desirous of being taken home, the improvement having been so marked, I could see no objection. It was 9 o'clock at night that I made my last call and gave orders to have her removed in the morning. She was in fine spirits, free from pain and quite strong. At 12:30 p. m. the hospital authorities telephoned me that Mrs. B. had died quite suddenly. I went there at once and obtained from her husband and the nurse their account of the unfortunate termination.

After I left the hospital at 9 p. m. she was sponged and given an alcohol rub, a procedure which had been followed since the operation. After this, her husband

was rubbing her back as had been his custom during the time she had been at the hospital. She requested to be allowed to turn on her back and go to sleep, in order to rest, to be ready for her trip home on the morrow. As she rolled on her back, her eyes closed, the breathing stopped and the heart ceased to beat. Restoratives were used, but to no purpose. At 10 the following morning I held the post-mortem and found the following conditions:

The wounds had all healed perfectly, not the slightest sign of inflammatory trouble. There was no thickening of the peritoneum. The lungs were in a healthy condition and so far as myself and my assistant could judge, were normal. Every inch of the right lung was strongly adherent, making it difficult to free it. The left lung presented the same conditions with the exception of a spot on the anterior surface, about 2 inches in diameter, over which was a clear jelly-like substance, much resembling semi-thick gelatine. The stomach was not quite so strongly adherent as at the time of operation, but still was firmly held by strong bands.

The interior of this organ was absolutely normal. The pancreas was healthy, but bound down by adhesions. The gall-bladder was the same. The heart was so bound and held by adhesions that its removal was not accomplished without the greatest difficulty and, then not until the adhesive tissue had been cut. It however seemed perfectly healthy, no blood clots or other evidence of internal disease. The kidneys, bladder, uterus and ovaries were perfectly healthy, but were held as in a vise by adhesions. The intestines were firmly held together by adhesive tissue, making it impossible to separate them without tearing. I therefore found the peritoneum without thickening, no adhesions between it and the intestines nor any evidence of inflam-

mation and every organ healthy but adherent. As I could get no history of active inflammation and there was no thickening of the peritoneum, thus show-

ing no inflammation of the intestines, what caused the condition?

1300 Grand River Avenue.

THE ACTION OF PASSIFLORA INCARNATA.*

By W. J. STAPLETON, M. D.,

Lecturer, Materia Medica and Pharmacy, Michigan College of Medicine and Surgery, Detroit, Mich.

The *Passiflora Incarnata*, Passion Flower, or May Pop, was so-called by the early Spanish settlers in America who imagined in it a representation of the Lord's Passion (the filamentous processes being taken to represent the crown of thorns, the three styles the nails of the cross, and the five antlers the marks of the wounds.) The plant is of a showy flowered, edible fruited species found in the southeastern United States. The parts used in medicine are the rhizomes and herbage. The elongated cylindrical root resembles *menispermum* in appearance. It is about one-fourth of an inch in thickness and of a yellowish or light brown color. The taste is bitter and lasting, the odor indefinite.

The preparation of the drug I have used has been a concentrated Tincture—dose Mxx to 3iv, well diluted in water, (the preparation, by the way, is not the much advertised one seen in our medical journals, but a tincture prepared by a reliable house) the intervals between doses being from one to three hours, depending upon the case.

I have used the drug with great success in insomnia, hysteria, neurasthenia, neuralgia, nervous and physical prostration and alcoholism.

In cases of nervousness, the result of pain, the drug is of no use, but in those cases in which there is mental unrest, agi-

tation, worry and exhaustion, when the patient sleeps restlessly or not at all,—in those conditions of cerebral excitement, especially where there is a tendency to convulsions and this particularly in children, you will find in *passiflora incarnata* an excellent remedy.

I call to mind a case of a young lady, unmarried, age 27, had been a school teacher and then a newspaper reporter on one of our daily papers—condition at time I saw her—constipated, appetite poor, insomnia pronounced, working at high pressure. I forgot to mention there was a history of insanity, father being in asylum. Constipation was overcome and then patient put on $\frac{1}{2}$ 3 dose of tincture of *Passiflora* at 7, 8, 9, and 10 p. m. well diluted in water. In one week she was markedly benefitted and in one month's time was able to sleep from 7 to 9 hours every night.

In the muscular twitching of children, due to cerebral excitement, the drug is administered in 10 to 20 drop doses in water every hour for two or three hours every night.

In the nervousness and sleeplessness accompanying acute or chronic alcoholism, *passiflora* oftentimes acts like a marvel. In these cases, the dose has been one to two teaspoonfuls every two hours until results are obtained.

In neurasthenia, we have a loss of tone of the whole nervous system, together oftentimes with neuralgic pains in different

*Read before the Wayne County Medical Society, March 10, 1904.

parts of the body. These cases require a nerve sedative, that is, something to relieve the high tension, secure natural sleep and rest for the brain and the nerve-centers.

We already have a depressed condition of the nerves and any remedies we use should not be of such a nature as to increase this depression. Passiflora in these cases will very often act like magic in doses of one teaspoonful every two, three or four hours.

There is also another condition, which for the lack of a better name is called "nerves." It is not necessary for me to give the symptoms of this condition. It is known to you all. Here is another case in which passiflora has acted better in my hands than either opium, bromides

or chloral, and I use it without fear of forming a drug-habit, causing constipation, biliousness or any one of the other after-effects of the above mentioned drugs.

In summing up the drug, I would say that its action is best obtained in cases of nervousness due to causes other than pain—that it is slow in acting because it is not a narcotic, but a nervine and sedative. It relieves irritation of the nerve-centers and improves sympathetic innervation, thus improving the circulation and nutrition, and is as a rule sure in its results—no bad after-effects, no habits formed.

I would suggest that the members use it in a few cases and report results.

176 Lafayette Avenue.

Chapter 299 of the Minnesota laws for 1903 provides that it shall be unlawful for any board of health, board of education, or any other public board or officer, acting in the state under police regulations or otherwise, or under any general law or city charter however adopted, to compel or require the vaccination of any child, or to make vaccination a condition precedent to the attendance at any school in the state, etc., etc. It magnanimously provides, however, that in epidemics of small-pox such boards of health and of education may, by joint action, require such vaccination by a duly licensed and authorized physician, to be selected by the person to be vaccinated. Let's see. Wasn't Minnesota one of the few states that licensed osteopaths in 1903?

As a result of practically unanimous endorsements received from members of the American Medical Association all over the country, Col. W. C. Gorgas, surgeon in the United States army, has been named by the president as chief medical officer of the Panama canal com-

mission. A concerted effort was made to have Col. Gorgas named as a member of the commission itself, and when this failed, the profession felt that they had not been treated with the consideration to which they were entitled. The appointment of Col. Gorgas in his present position will probably have the effect of smoothing things over.

The American Neurological Association has fixed the time of its meeting at St. Louis for September 15, 16 and 17. This will be immediately followed by the sessions of the various medical departments of the Congress of Arts and Sciences, beginning September 19.

The February bulletin issued by the Michigan State Board of Health indicates that typhoid is much more prevalent than usual, and urges the general adoption of that efficient prophylaxis—*boil the drinking water*.

DETROIT MEDICAL JOURNAL

A MONTHLY EPITOME OF
PRACTICE AND THERAPEUTICS

FRANK BURR TIBBALS, M. D., Editor

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SUBSCRIPTION PRICE, \$1.00 PER YEAR.

SINGLE COPIES, 15 CENTS.

NOTE.—We do not assume responsibility for the opinions of contributors.

The management cannot undertake to return rejected manuscript unless full postage for the purpose is submitted with the contribution.

Address all communications to 103 and 105 Miami Avenue, Detroit, Michigan, U. S. A.

Vol. 4. DETROIT, MICHIGAN, APRIL, 1904. No. 1.

The Money Waste of Typhoid.

Dr. Victor C. Vaughan, dean of the medical department of the University of Michigan, in his address on the "Water Supply of Cities," before the Michigan Municipal League, says:

"There die in this country every year from typhoid fever alone not less than fifty thousand people. There are sick in this country not less than five hundred thousand people from this same cause. To get down to dollars and cents, which is the American way of figuring everything, say that the average human life is worth a thousand dollars. Then with fifty thousand deaths from this disease, we are losing by death alone fifty millions of dollars. But there are five hundred thousand people sick. Then we will say that the time of each one of these individuals is worth a dollar a day. Besides that there must be at least one nurse, and we will suppose that these services are worth one dollar a day. Then for each day that those five hundred thousand people are sick, the people of the United States are paying one million dollars. And forty days is certainly an average duration for typhoid fever. Then

with this forty millions and the fifty millions lost by death, it is interesting to note that the people of the United States are paying a tribute of ninety million dollars to our ignorance for the existence of a disease which, if every man did his duty, would not exist at all."

What is everybody's business, however, is nobody's business; hence, it is the duty of the state to make precautionary measures against infection of its streams and lakes obligatory by stringent laws regarding the disinfection of all typhoid excreta and the frequent analyses of all public drinking waters. It may not be possible to absolutely prevent occasional accidental water infection, but it certainly is possible to detect such infection early and prevent almost entirely its invasion of the human organism.

The Modern Hospital.

More and more strongly is the belief growing in both the lay and the professional mind, that a well equipped hospital offers facilities for the treatment of diseases, medical and surgical, almost impossible of attainment in the home; and the prejudice against hospitals as such is rapidly becoming a thing of the past. The close supervision by the house staff, the efficient nursing and dietary régime, the ready accessibility of all recognized remedial aids are invaluable, supplementing materially the work of the physician for the benefit of the patient. There have been at times certain avoidable abuses in the management of hospitals whereby the profession as a whole has been harmed for the benefit of the few. We refer to the indiscriminate granting of gratuitous medical services to people who are able to pay and the denial of hospital facilities to all but the limited number of men on the visiting staff. These two factors, where existent, have engendered some prejudice among the rank and file of the profession against

hospital treatment in general. Happily, such managerial errors are not common in most cities and with the gradual unification of medical teaching now going on, the main incentive to unnecessary gratuitous medical service for selfish ends disappears.

All hospitals not richly endowed, experience the same difficulty in obtaining money enough to care for the cases seeking admission from the poorer or middle classes at such rates as they can afford to pay. Municipal hospitals are always open to the abuses of political control, and frequently fall below the efficiency of private hospitals governed by honorary boards of philanthropic business men.

The annual deficit of some of the large hospitals of the country falls but little short of one hundred thousand dollars—a large amount to be raised each year among the charitably disposed supporters.

Illustrative of the necessary cost of hospital management are the statistics from the recent annual report of Harper, our largest Michigan hospital. In 1903 2,611 patients were cared for, a daily average of 120, at a *per diem* cost of \$1.82 or \$12.72 per week, or a total expenditure of nearly \$80,000. Of this amount, patients paid about \$63,000, receipts from students, training school, ambulance, special funds and interest making up the balance.

About 25 per cent. of all patients were cared for free through the aid of special funds, while in every ward patients were taken at \$7.00 per week; the hospital contributed nearly as much, the daily cost per patient being \$1.82.

What every hospital run along modern lines and desirous of relieving pain and suffering, and saving life needs, is a larger endowment whereby it may extend its usefulness among the people who need it most—the worthy poor; and the

kings of finance who are industriously seeking libraries, colleges, parks and public buildings to endow, should not overlook the most humanitarian idea of all, the hospital, which everywhere needs more money to carry on its good work.

What is to Become of the Medical Graduate?

Under this heading Dr. John L. Irwin, in a recent *Journal of the Michigan State Society*, points out that the Bureau of Vital Statistics demonstrates for a decade past a gradual decrease in the prevalence of disease of all types with of course a corresponding lowering of the death-rate. Hence he concludes that the income of physicians in general practice must diminish correspondingly and that there is no place for the medical graduate today—and still less in the future. We are accustomed to believe that figures cannot lie, and yet there is nothing more misleading than statistics. For instance, one recent writer has treated several hundred loose kidneys by belts with uniform success, another has operated upon a number somewhat less, but with equal success. Where lies the happy mean which determines the best thing to do in such a case?

We agree, in a congratulatory mood, that disease is diminishing but disagree, in an equally happy mood, with the contention that there is no work left for the doctor. The Chinese pay physicians to keep them in good health, regarding illness as a failure to deliver the goods as ordered, and we believe the American people are coming more and more to prefer the prevention of disease to its cure. Hence the doctor is more frequently consulted for the cold which precedes pneumonia, the otitis media which precedes mastoid disease, or the constipation which precedes rectal diseases. The development of special lines of work has

placed a vast amount of special knowledge in the hands of the general practitioner and his field has broadened immensely.

It is true that the profession is overcrowded, but not with well equipped men. It is here, as elsewhere, "the survival of the fittest," and there will be a better place in the future for the well trained man than now, because the increasing requirements for practice and the longer and more expensive medical training exacted will materially lessen the output of graduates, approximating the supply more nearly to the demand.

The fulfillment of the recent prediction of Dr. St. John Roosa of but one medical school in New York City and that of Dr. Osler, of "within 50 years but one great institution for the technical instruction in medicine with all the practical teaching in hospitals" will have a far more beneficial influence upon the standing, influence and income of the medical profession than the gradual improvement of public health can have a detrimental one.

The Pure Food and Drug Bill.

There is at this writing before the United States Senate (having passed the House) a measure in which the medical profession is vitally interested. This bill, introduced by Senator Heyburn, will materially interfere with, if not prevent, the sale of adulterated foods and misbranded drugs, and is being bitterly fought by the patent medicine combine, the whiskey-blenders and various other interested parties, the retail druggists who counter prescribe nostrums and "patents" being active in opposition.

The United States Pharmacopœia is made the standard of drug purity, with adequate provision for new legitimate products not as yet installed therein. The bill will prevent the manufacture and sale of nostrums which contain de-

leterious substances or those which are fraudulent in not containing the ingredients advertised.

It remains to be seen whether or not the reputable medical profession or the proprietary medicine interests have the more influence in national legislative halls. Certainly the bill merits the enthusiastic support of every physician.

The Committee on Medical Legislation of the American Medical Association is sparing no effort to arouse the profession and deserves success. We hope every reader who has not already done so will at once write his senators urging the passage of the bill.

EDITORIAL NOTES.

"Alumni Clinic Week" at the Detroit College of Medicine and Surgery has always proved an interesting and profitable season to those who attend it, and this year will be no exception to the general rule. The dates for the reunion will be from April 27 to May 7, and the time will be well filled with clinics and entertainments. A number of well known physicians and surgeons are down on the program and the physician who attends will be interested from start to finish.

The program follows:

WEDNESDAY, APRIL 27—10 o'clock: Room 1, College Building; Address of welcome, Dr. Angus McLean, '86; 11 to 1 o'clock: St. Mary's Hospital, Surgical Clinic, Dr. T. A. McGraw; 3 o'clock: Room 1, College Building, Treatment and Dietetics of Diabetics, Dr. F. W. Mann, '85; 4 o'clock, Room 1, College Building, Obstetrical Forceps; Their Uses and Contraindications, Dr. P. C. McEwen, '95.

THURSDAY, APRIL 28—9 o'clock: Room 1, College Building, Communicable Diseases, Dr. Guy L. Klefer; 10 o'clock: Diagnostic and Prognostic Value of Urine Examinations, Dr. A. H. Steinbrecher, '81; 11 o'clock: St. Mary's Hospital, Neurology, Dr. David Inglis, '71; 12 o'clock, Eve and Ear, Dr. Eugene Smith; 3 o'clock: Room 1, College Building, Intra-Nasal Surgery, Dr. S. G. Miner; 4 o'clock: Room 1, College Building, Surgery of Obstetrics, Dr. H. W. Yates, '94; 8 o'clock, Guests of the Wayne County Medical Society, Dr. W. J. Mayo, of Rochester, Minn.

FRIDAY, APRIL 29—9 o'clock: Room 1, College Building, Treatment of Chronic Pneumonia and Pleuritis, Dr. E. L. Shurly; 10 o'clock: Etiology of Hay Fever, Dr. Otto Scherer, '90; 11 o'clock: St. Mary's Hospital, Adenoids, Dr. H. J. Hartz; 12 o'clock, Gynaecology, Dr. Repp, '95; 3 o'clock, Room 1, College Building, Diseases of the Rec-

tum and Anus: Demonstration of Modern Methods of Diagnosis and Treatment; Dr. L. J. Hirschman, '99; 4 o'clock, Room 1, College Building, Pain in Visceral Disease, Dr. C. G. Jennings; 8 o'clock, Theater party.

SATURDAY, APRIL 30—9 o'clock: Harper Hospital, Surgical Clinic, Dr. Angus McLean, '86; 10 o'clock: Surgical Clinic, Dr. J. H. Carstens, '70, and Dr. J. N. Bell, '92; 11 to 1 o'clock: Surgical Clinic: Dr. H. O. Walker; Eye and Ear, Dr. D. M. Campbell, '85; Dr. George Frothingham, '90; 2 o'clock: Laboratory, College Building, Chemistry, Dr. J. E. Clark; 3 o'clock, Laboratory Building, Bacteriology, Dr. A. Go-renflo, '96; 4 o'clock: Room 1, College Building, Malignancy in Diseases of the Skin, Dr. A. E. Carrier; 8 o'clock: Harmonie Hall, Reception to Senior Class; Entertainment by F. Stearns & Co.

MONDAY, MAY 2—9 o'clock, Room 1, College Building, Surgery of Gall-Bladder and Ducts, Dr. H. O. Walker; 10 o'clock, Tumors of the Intestines, Dr. T. A. McGraw; 11 to 1 o'clock, St. Mary's Hospital, Dermatological Clinic, Dr. A. E. Carrier, Dr. A. P. Biddle; 2 o'clock, Laboratory Building, Pathological Demonstrations With Lantern Slides and Microscope; 2 o'clock: Clinical Laboratory, Haematology, Dr. Thad-deus Walker, '96; 3 o'clock, Pathology of the Appendix, Dr. P. M. Hickey; 4 o'clock: Animal Parasites, Dr. Haywood; 8 o'clock: Class Reunions—'69, '74, '79, '84, '89, '94 and '99.

TUESDAY, MAY 3—9:30 o'clock: Children's Free Hospital, Orthopedic Clinic, Dr. D. LaFerte; 11 o'clock: Harper Hospital, Medical Clinic, Dr. E. L. Shurly, Dr. George Duffield, Dr. F. W. Mann, Dr. C. G. Jennings and Dr. W. R. Chittick; 2 o'clock: Guests of Parke, Davis & Co. Scientific Demonstrations in Research Laboratory. Dinner at Russell House, 6:30—admission by card only.

WEDNESDAY, MAY 4—9 o'clock: Harner Hospital, Internal Medicine, Alex. McPhedran, M. B., Prof. of Internal Medicine, University of Toronto, Ont., and C. G. Jennings, M. D., Prof. of Medicine and Diseases of Children, Detroit College of Medicine; 3 o'clock: St. Mary's Hospital, Cystoscopy and Ureteral Catheterization, Dr. F. W. Robbins, '84; 4 o'clock: St. Mary's Hospital, Chronic Urethritis, with Demonstration of Urethroscope, Dr. W. C. Martin, '90; 8 o'clock: Reception by Dr. and Mrs. Don M. Campbell, 1125 Jefferson avenue.

THURSDAY, MAY 5—9 o'clock: St. Mary's Hospital, Pediatrics, Dr. Chas. Douglas; 10 o'clock: St. Mary's Hospital, Surgery, Dr. T. A. McGraw and Dr. H. O. Walker; 1 o'clock, Harmonie Hall, Annual meeting of Alumni Association, followed by lunch and entertainment by Nelson, Baker & Co.; 8 o'clock, Light Guard armory, Commencement.

FRIDAY, May 6—9 o'clock: St. Mary's Hospital, Medical Clinic, Dr. A. Chapoton, Dr. Donald, Dr. S. G. Miner and Dr. William Repp; 3 o'clock: Laboratory building, X-Ray; Development of Skeleton; X-Ray Therapy, Dr. P. M. Hickey, '92; 4 o'clock: X-Ray Therapy, Dr. H. H. Cook, '97.

SATURDAY, MAY 7—9 o'clock: Harper Hospital, Surgical Clinic, Dr. H. O. Walker, Dr. D. La Ferte, Dr. J. K. Gailey, Dr. W. P. Manton, Dr. J. H. Carstens, Dr. H. W. Longyear, Dr. A. E. Carrier and Dr. H. R. Varney.

have cleared up pretty thoroughly our conception of the mode of action of toxins and anti-toxins, and have demonstrated both the theory and the efficacy of serum therapy.

Upon his return from Chicago he was the guest of Parke, Davis & Co., in Detroit, being entertained by what, judging from the published list of guests, might be termed a sumptuous "Dutch lunch."

Prof. Miculicz, of Breslow, has devised a novel apparatus, which he used for the first time before the German Surgical Congress last month. It consists of an airtight cabinet, capable of containing the patient and two operators, the head of the patient protruding through a hole in the side. The principle involved is the reduction of the air pressure to such an extent as to prevent the collapse of the lungs when they are exposed for operation. Experiments with animals proved the efficacy of the means employed. When the air in the cabinet was partially exhausted, the lungs on exposure functionated regularly and the heart action continued without other interruption than that due to the anæsthetic. With the increase of pressure in the cabinet the lungs collapsed. It is believed that the use of the device will have the effect of widely increasing the range of chest surgery and that of operations in the region of the œsophagus and the thorax.

A notable international medical event was the recent conferring of an honorary degree by the University of Chicago upon Prof. Paul Ehrlich, director of the Royal Institute for Experimental Therapy at Frankfort, Germany.

Prof. Ehrlich's medical fame rests upon his investigations into the fundamental principles underlying the problem of immunity against disease and his researches

Advices from London state that the use of radium in the treatment of cancer has been discontinued at the cancer hospital. Sixteen cases have been under treatment, and it is stated that the only favorable result has been an occasional cessation of pain. On the other hand, a number of patients have complained of increased discomfort.

NEW INSTRUMENTS AND DEVICES.

Mention of new instruments and devices in this department is entirely complimentary and articles illustrated are judged on their merits.

We invite manufacturers and physicians to send us matter suitable for publication under this head. A description of the device and an electrotype or half-tone with a base not greater than two and five-eighths inches should be sent.

Always mention the price of the article in question.

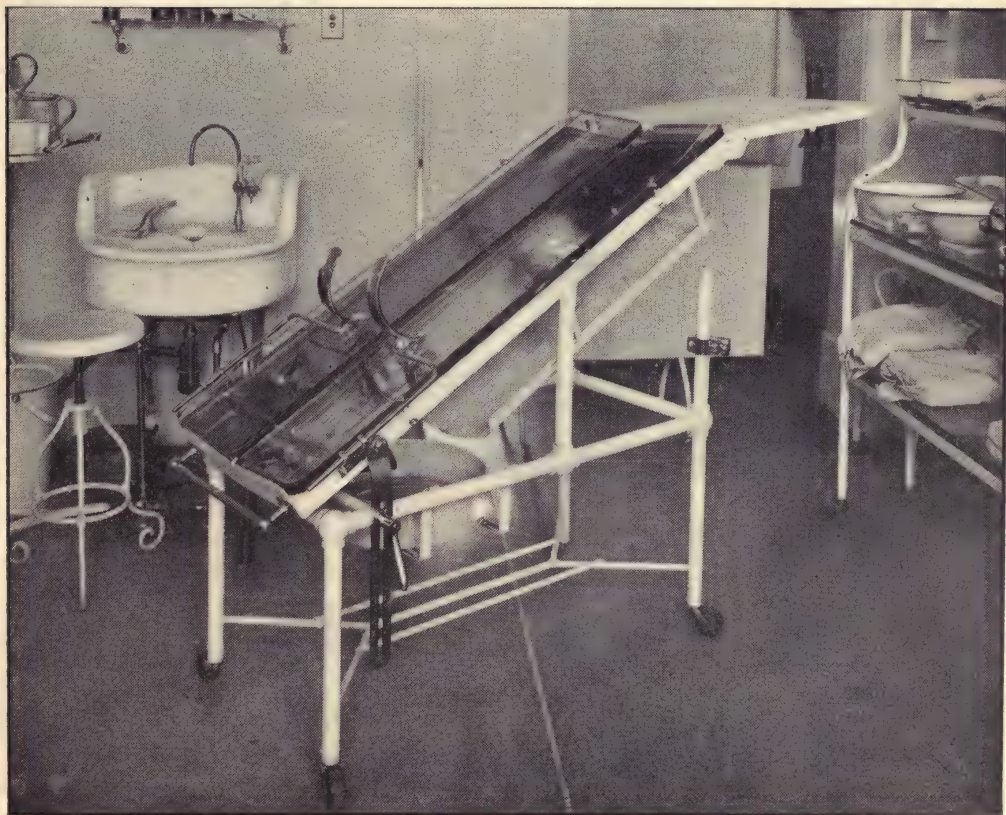
The management cannot undertake to return cuts unless postage for same accompanies the letter with which they are sent.

Metcalf Surgical Table.

This operating table, designed especially for abdominal and pelvic work, was built from the plans of Dr. Wm. F. Met-

calf, of Detroit, who has been using it for the past five or six months in Harper hospital. It has several features that stamp it as distinctly in advance of other operating tables. One of the chief of these is the device for warming the table. A double nickeled copper pan extends along the entire top of the table, and is filled through a hole in the bed of the table; an hour or so before operation, this pan is filled with hot water, the heat from which radiates up through the space between the two heavy glass slabs which form the working plane of the table and serves to keep patient warm while the surgeon is at work.

An ingenious arrangement makes this warming pan drain toward the center and the head end of the table, the fluids running through a spout into a receptacle that catches all the water used about the



table, no matter what the position of the latter may be. This receptacle is clearly shown in the illustration of the table in the flat position, with the spout above, leading to it.

Shoulder-braces for use in the Trendelenburg position are provided, and when not in use they may be turned under the table, out of the way. For this position also, the foot-board of the table may be

drainage pan to be drawn out from under the table, ready for use. This pan also drains into the receptacle first mentioned.

Owing to the fact that provision is made for holding the patient comfortably and securely in the Trendelenburg position, it is not necessary to secure the legs in any way.

Another feature of special interest is the ease and rapidity with which a pa-



turned down, stopping at any desired angle, so that the shoulder-braces support the patient comfortably, without having the knees too sharply bent. The edges of the glass slabs are rounded, so that there is no discomfort to the patient due to the flexing of the knees over a sharp edge.

For vaginal work, the portion of the foot-board nearest the table lets down on a hinge, as shown, and this permits a

patient may be changed from one position to the other. The center of equilibrium of the table is over a bar near its center, and the anæsthetist may readily move the table into any position required by the operator. The position of the glass slabs on the surface is also such that a weighted speculum may be hung at the end, between the slabs, to depress the

perineum so that the operator may work without an assistant for this purpose.

The entire table is a handsome piece of furniture, and exceedingly well adapted for the special purposes for which it is designed.

Applicator, for Pyorrhœa and Oral Abscesses.

An eastern firm has designed this inexpensive little applicator for the treatment of pyorrhœa alveolaris, alveolar abscesses and ulcerated conditions. By inserting the fine point of this miniature



syringe between the tooth and the gums the abscess pockets may be completely flushed out with the antiseptic solution used. The treatment may be administered two or three times a day, and especially just before retiring, when the cavity is kept under the influence of the treatment for several hours at a time when

the mouth, gums and teeth are in a state of comparative quiet.

For patients who have had bridge work done on their teeth this little applicator is almost invaluable. Bridge work is sometimes difficult to keep clean, in spite of conscientious effort on the part of the patient, but with this device it may be kept in a sanitary condition without much difficulty. The device is also found to be of much use in giving an eye bath or spray.

Its cost is so small as to be almost negligible. Sixty cents a dozen is the retail price.

Rectal Shield.

This shield is designed for insertion into the rectum before an operation, the aim being to prevent the operator's finger



from contamination with the rectal secretions, in case it becomes necessary to insert the finger. The inflatable rubber bulb shown serves two purposes; it insures the retention of the shield in the position desired, and also acts as a dam against the descent of feces. The bulb is made of material sufficiently strong to admit of its being inflated to any desired size, and the shield complete retails for 75 cents.

PROGRESS OF MEDICAL SCIENCE

The Medical Aspect of Decapsulation of the Kidneys.

At a recent meeting of the Chicago Surgical Society, Dr. Arthur R. Elliott contributed a paper upon this topic (abstracted in the *Ill. State Journal*). He says that a study of the statistics available to date shows a high mortality with the ratio of cases improved only about 35 per cent., and emphasizes the following conclusions:

1. Chronic Bright's disease in its development constitutes a diseased condition of the entire system.

2. It is a disease of very gradual development, and in the great majority of cases, has existed for months and years before the patient comes under observation.

3. It is produced by a chronic toxemia, either systemic or infective in origin, which produces coincidentally as a result, widespread arterial and cardiac degenerative changes, which, being once established, are permanent, and which in their development eventually constitute the most threatening element of the disease.

4. General oedema or anasarca in chronic renal disease is in many instances in great measure a cardiac dropsy brought about by advancing myocardial degeneration. It is occasionally so in chronic parenchymatous nephritis, and almost invariably so in chronic interstitial nephritis.

5. It may be stated that in like manner, developing anuria and uremia in chronic nephritis may be largely cardiac in production, the functional inadequacy of the kidneys having its inception in the fall of blood pressure, incident to circulatory failure.

6. In the later stages of chronic nephritis of whatever character, the case is apt to take on these cardiac aspects which virtually convert the therapeutic problem into a question of sustaining a failing heart.

7. Albuminuric retinitis must be looked upon as one of the terminal symptoms of chronic nephritis. The concordance of opinion places a limit of two years upon the prognosis after the development of this complication. The statistics of operated cases gathered by Suker, show that in place of prolonging this limit of expectancy, operation has a decidedly contrary effect.

8. It is to be borne in mind that chronic nephritis is a disease of slow and spasmodic development. It is well to realize its exacerbations and remissions, so as to avoid the error of mistaking remissions for cures.

9. The mere fact that the general condition of the patient improves somewhat after decapsulation does not establish the validity of the operation, for hygiene and rest will do the same for the patient to a remarkable degree in many cases. As the factors of hygiene and rest are invariably associated with the surgical procedure, it is possible that the resulting benefit may, to some extent, accrue from those sources.

10. The results of experimentation demonstrate that within a period of three and one-half months after decapsulation a new, and in most cases, a tougher fibrous envelope has taken the place of the original capsule. This fact may account for the many relapses and deaths after that period in operated cases, and in chronic cases, at least, it narrows the prospect of improvement to a period of months.

Acute Thyroidism.

Wells (*American Surgery and Gynecology*, March, '04), reports a case of acute thyroidism following curettage as illustrative of the sympathetic relation existing between the thyroid in women and the pelvic organs. The patient, aged 53, curetted for relief of post-climacteric bleeding due to a chronic endometritis, had for many years had a slight enlargement of the right lobe of the thyroid, an excitable, rapid pulse, and a slight tremor, but no exophthalmia. Shortly after operation, the pulse became very rapid, the patient became flushed tremulous, nervous, voluble, with sweating, diarrhoea and vomiting. These symptoms of an extreme toxæmia continued with little variation for 24 days, the condition at times being such that death seemed imminent. The predominant symptom was rapid and weak heart action; when improvement began, until she reached a condition approximating that before the operation.

The thyroid was perceptibly enlarged, especially on the right side, and no treatment can be said to have had any influence upon the gradual amelioration of symptoms.

Adenoid Operation.

John R. Winslow, B. A., M. D., (*Journal of Eye, Ear and Throat Diseases*, January-February, 1904), gives the following summary of methods employed in removal of hypertrophied lymphoid tissue, agreeing in many points with the views expressed by Dr. Preston M. Hickey, in this issue:

(1.) Infants from a few weeks old to about two years—no anæsthesia; unarméd finger. Dr. Stewart reports the removal of an adenoid mass, measuring three-eighths of an inch in length by three-quarters of an inch in depth, from a child *eleven days* old, with immediate relief of the symptoms, which were snoring

and inability to nurse. An operation on a child of eighteen days is reported by Emil Meyer. The operation in young infants may not result in *complete* removal of the hypertrophied lymphoid tissue, but yields satisfactory results, as regards both breathing and ability to suckle; a thorough operation may be necessary at an older age. If the little finger will not enter the naso-pharynx a small wire ear curette or a Bœckmann curette, one-third of smallest size, may be used.

(2.) Children *over 14 years of age* and *adults*—cocaine anæsthesia, at times combined with adrenalin, patient upright, if a child, wrapped in sheet, mouth-gag, curette. Two sittings may at times be required. Examine with mirror afterwards.

(3.) General anæsthesia should be reserved for patients too unmanageable or too nervous to be controlled; children *under 14 years of age* and nervous *adults*. Post-nasal adenoid growths should not be disturbed unless the operation is to be *thorough*. Anyone can insert an instrument into the epipharynx and *tear out* a certain amount of lymphoid tissue, but such is not *deserving* to be called *operation*. Most of the disrepute of the operation is due to work of this character. A *simple* adenectomy, when the tonsils are not enlarged and there are no ear complications, can be thoroughly performed during the 40 seconds of *nitrous oxide* anæsthesia. This requires a rapid operator, skilled assistants and administrator, and everything in readiness for immediate use. The patient should be put to sleep with the mouth-gag (Denhard best) *in situ* and the mouth wide open. The apparatus is cumbersome and suitable only for hospital or office use, but the anæsthesia is the safest known.

Tonsils and adenoids can be removed at the same time, if projecting, by a rapid operator, during the two to three minutes of *bromide of ethyl* anæsthesia.

When a longer time is requisite, *ether*

is unquestionably the best and safest anæsthetic in these *lymphoid* cases.

Statistics show an exceptionally high mortality from chloroform anæsthesia in individuals of this constitutional type.

By its use an operation, in itself almost absolutely free from danger, is converted into one of the most *immediately deadly* of any of the surgical operations; therefore, the use of chloroform in the operation for naso-pharyngeal adenoids or hypertrophied tonsils is inadmissible. The supported hanging head (Rose) *position* is the most satisfactory and safest.

Surgical Treatment of Cancer of the Larynx.

Dr. E. J. Moure, of Bordeaux (*Journal of Laryngology, Rhinology and Otology*, December, 1903), gives the salient points in the technique of operations on extra-laryngeal cancer. In the treatment of malignant degenerations of the laryngeal mucous membrane beginning at the free edge of the epiglottis, or its lingual, or its laryngeal surface, he advises extirpation by the endo-laryngeal method, either with the forceps of Moritz-Schmidt, of B. Fraenkel or with the hot snare.

"It will suffice," he says, "after the application of cocaine or adrenalin to the region, to enclose the diseased portion of the epiglottis in the jaws of the instrument or in the *serre-nœud*, and to cut it off. This operation is generally followed by a relatively slight hæmorrhage, which gives little or no trouble.

"Operations of this kind are frequently performed, and, moreover, I consider it a logical form of treatment, and one to be recommended under such circumstances.

"When the tumor has passed a little lower, and has invaded nearly the whole of the epiglottis, when the morbid degeneration spreads on to the base of the tongue, or even to one of the glosso-epiglottic folds, particularly the median, excision by the natural passage will not be

expedient. There is every necessity, if a complete operation is desired, to proceed by the external route. Moreover, I do not believe that suprahyoid pharyngotomy, either lateral or transverse, gives as free and as convenient access to the region as the transhyoid route recommended by Gussembauer, and held in esteem by Vallas of Lyons.

"I formerly published the observation of some cases operated on with success by this method, of which I will briefly describe the technique. The operation is one of the simplest and easiest to put in practice. It is done, so to speak, *à blanc*; that is to say, without effusion of blood, and, of course, under chloroform. The preliminary tracheotomy secures the respiration from the risk of blood in the air-passages, and so allows the operator to proceed quite at his ease in the region with which he is dealing. After having made a vertical incision from below the chin to below the larynx—that is, to the point of the trachea at which it is intended to insert the cannula—the tissues are divided layer by layer *before opening the air-passage*. I even advise dividing the hyoid bone in the middle line by the aid of bone-forceps, and only when the base of the tongue has been reached the insertion of an ordinary tracheal cannula. When the patient has expelled the blood which enters the air-passages at this moment, more chloroform is given; then a vertical incision is carried through the base of the tongue, which is not very thick at this level, and the two halves, being taken by means of E-shaped forceps, are drawn outward in such a way as to expose the epiglottis, which is easily recognized. The finger inserted into the wound allows the latter to be drawn out and to be excised at the level of its insertion into the larynx, and consequently for its complete excision to be practised. Curetting and a vigorous application of the thermo-cautery complete the opera-

tion. The two halves of the tongue are immediately sutured with catgut, and the pieces of the hyoid bone are supported in position by sutures of the muscles of the layer above and below the hyoid bone. Finally, the skin is brought together with horsehair.

"It is preferable to leave the tracheal cannula in place for some days, but the introduction of an œsophageal tube in order to feed the patient is unnecessary, for I have never seen any trouble of deglutition supervene in any of my patients; this trouble is perhaps more likely to occur during the first few days following the operation than a little later, when the post-operative swelling has disappeared. This method can evidently be considered as the ideal, because it allows also of the removal of the lymphatic glands of the suprahyoid region if necessary. It cannot, however, of course, more than any other radical operation, always afford us a protection against recurrences."

Ethyl Chloride as a General Anæsthetic.

Montgomery and Bland (*Journal A. M. A.*, April 2, 1904), recommend the use of ethyl chloride in gynæcology for examination of cases and in minor operative work.

It has all of the advantages and none of the disadvantages of nitrous oxide and ethyl bromide. It is the safest of all anæsthetics except nitrous oxide, with a death-rate of not more than one in many hundred thousand.

An ordinary cone may be used as an inhaler, so constructed as to fit snugly over the face, with several layers of gauze over the opening on which the anæsthetic is sprayed. The time necessary for complete anæsthesia is seldom more than from one-half minute to two minutes, and is well used as a preliminary to ether, where prolonged anæsthesia or complete muscular relaxation is required. Prostration, nausea and vomiting are rare sequellæ.

The principal disadvantages of the agent as a general anæsthetic are:

1. The patient passes under and out of its influence so quickly that the administrator must be unusually expert to avoid on the one hand, profound anæsthesia, and on the other, the emergence from its effects at an important stage of the operative procedure.

2. The expense of the drug excludes its use in a general clinic, but the increased employment of this agent which must necessarily follow the general recognition of its advantages, will doubtless result in a reduction of its cost.

The Rôle of the Appendix in Pelvic Inflammation.

Baldy (*Medical Record*, January 9, 1904), disapproves of the routine practice of removing the vermiform appendix in laparotomy as a prophylactic measure, regarding the appendiceal adhesions often found as coincidental with the inflammation of adjacent serous surfaces and not as evidence of disease of the appendix itself.

He has never met a case in which, having found pus in the tube, pus was also present in the appendix or the appendix perforated or gangrenous, nor, on the other hand, with the appendix as the origin of the trouble, where pus was found in ovary or tube. He therefore concludes that the two diseases are rarely associated and that one never causes the other.

Drs. Allan D. McLean, of Detroit, C. C. Grieve, of Shepherd, and A. J. Geigner, of Woodland, Mich., recent graduate of the U. S. Navy Medical School, have been assigned to the Asiatic squadron for a two years' cruise.

Dr. C. H. Oakman, of Detroit, has been appointed a member of the State Board of Examiners in Dentistry.

BOOK REVIEWS

Von Bergmann's Surgery. A System of Practical Surgery. By Drs. E. von Bergmann, of Berlin, P. von Bruns, of Tübingen and J. von Mikulicz, of Breslau. Edited by William T. Bull, M. D., Professor of Surgery in the College of Physicians and Surgeons (Columbia University), New York. To be complete in five Imperial Octavo volumes, containing over 4,000 pages, 1,600 engravings and 110 full-page plates in colors and monochrome. Sold by Subscription only. Per Volume, Cloth, \$6.00; Leather, \$7.00; Half Morocco, \$8.50, Net. Volume I just ready. Pages, 936. Engravings, 361, plates, 18. Lea Brothers & Co., Publishers, 706-710 Sansom St., Philadelphia, Pa.

An epoch in the history of surgical publications has been made by the appearance of this valuable series, which is written by three of the best known modern authorities on surgical matters. Its immediate success abroad was so great that the earlier volumes were out of print before the concluding ones of the series could be placed on the market. A second edition, which enjoyed careful revision and was brought thoroughly down to date, is the basis of the present edition in English, which is now being issued. Dr. Bull has had valuable co-operation from Dr. William Martin, also of the Columbia's medical faculty, and others. The English edition's value is increased by a larger number of illustrations, taken from plates found in the most recent German medical and surgical literature, and wherever the technique accepted by English and American surgeons differs from that preferred by Continental workers, reference has been made to the favorite methods among English-speaking people.

The work is an exhaustive one, and in its entirety will form a complete ency-

clopedia of modern surgical knowledge. There are few works on surgery, even those devoted to a specialty, which contain fuller reference to detail than are found in this series. All the contributors are enthusiastic students, who write with well trained minds, and from a large clinical knowledge. Abundant data, the result of careful, original research in special fields, are published, with exact clinical reports that are of immense practical value. As a whole, the series forms the most important surgical work of the day, and it will be found of incalculable value to the student and to the scientific surgeon, as reflecting the most advanced and approved methods of modern surgical practice.

Volume I, devoted to the surgery of the head, covers the following subjects: Injuries and Diseases of the Skull and its Contents; Malformations, Injuries and Diseases of the Ear; of the Face, including Plastic Operations and the Neuralgias of the Head; of the Salivary Glands, including Anomalies; of the Jaw; of the Nose and its Adjacent Tissues; of the Mouth; and of the Pharynx. The contributors to this volume are Prof. E. von Bergmann, Prof. Fedor Krause, Prof. U. Krönlein, Prof. W. Kümmel, Prof. Küttner, Privat-Dozent E. Lexer, Prof. C. Schlatter and Oberarzt P. Wiesmann.

Additional volumes of this series will be issued in rapid succession, and we feel safe in predicting that the edition in English will meet with fully as favorable a reception at the hands of the profession as was accorded the first German edition abroad. The series has already been translated into both Spanish and Italian.

Progressive Medicine. Vol. 1, March, 1904. A Quarterly Digest of Advances, Discoveries and Improvements in the Medical and Surgical Sciences. Edited by Hobart Amory Hare, M. D., Professor of Therapeutics and Materia

Medica in the Jefferson Medical College of Philadelphia. Octavo, 337 Pages, 7 Illustrations. Per annum, in four cloth-bound volumes, \$9.00; in paper binding, \$6.00, carriage prepaid to any address. Lea Brothers & Co., Publishers, 706-710 Sansom St., Philadelphia, Pa.

A new feature of this deservedly popular series is its appearance in paper binding. This is a distinct advantage in many ways; the price of the work is thus reduced to one that puts it on an even basis with the Continental publications, the books are lighter and more easily handled, and if the owner desires they may be bound in a manner to coincide with his personal taste in the matter of a book's dress. The series, it will be noted, is also published in the style with which we are already familiar, at a comparatively low price.

We have before now taken occasion to approve the manner in which this series is published. The constant researches along the various lines of activity in the profession give rise to much information that is new and valuable. To sift this new knowledge down to its lowest terms, selecting the practical and the tried, and to present it to the profession in a compact and easily digestible form, is a task for the publishers that results in endless convenience to the busy practitioner. He may take up a volume of this series and at a glance get the most recent methods of diagnosis and treatment of a case upon which he is engaged. The text is necessarily condensed to as low a point as is compatible with lucidity, and there are no words wasted.

The present volume includes contributions from Drs. Floyd M. Crandall, Charles H. Frazier, Charles P. Grayson, Robert B. Preble and Robert L. Randolph, and their work includes contributions to the literature on cerebral pres-

sure, heart surgery, exophthalmic goitre, transmission of disease by insects and other timely and important topics of interest. The last theories on the etiology of rheumatism, tetanus and hay fever are set forth, and the text includes material on surgery of the head, neck and thorax, infectious diseases, diseases of children, laryngology, otology and rhinology. This first volume is fully up to the high standard that has already been set for this series by the editors and publishers.

Immune Sera. Hæmolysins, Cytotoxins, and Precipitins. By Prof. A. Wassermann, M. D., University of Berlin. Authorized Translation by Charles Bolduan, M. D. Pages, 76. Price, Cloth, \$1.00. John Wiley & Sons, Publishers, New York and London, 1904.

Serum diagnosis and serum therapy have excited a great deal of interest and some lively discussion, and the subject is one which is constantly increasing in importance to the physician. Although this is a fact, we are still practically without a concise treatise on this head, a lack which this little book supplies. The subject-matter is taken from Wassermann's lectures in the University of Berlin in the year 1903, and has met with kindly treatment at the hands of the translator. Much of it is purely technical, but the definitions are luminous, even to one not a specialist in laboratory work, and the text is interestingly handled.

Descriptions of some important investigations by well known authorities, along this line, are given, and the reader is referred to a large number of reference books, chiefly in German. The little book is a sort of primer on the immune sera and should be valuable in the extreme to anyone who is interested in the subject. A number of diagrams are furnished as a means of explanation for some of the theories held by different and differing authorities.

The International Medical Annual; A Year Book of Treatment and Practitioners' Index. 1904. Twenty-second Year. Pages, 742. Price, Cloth, \$3.00. E. B. Treat & Co., Publishers, 241-243 W. 23rd St., New York.

Treat's International Medical Annual has for nearly a quarter of a century enjoyed an enviable reputation among a large and constantly increasing number of members of the medical profession, who regard the work in the light of a *vade mecum*. The enormous amount of new research work carried out in 1903 has given the editors and collaborators a wealth of material from which to make their selections, and the fact that they have succeeded in comprising so much that is new and valuable within such comparatively narrow limits is greatly to their credit. In its present form the work includes practically all the advances made in twelve months along medical and surgical lines; this has been carefully arranged with a view to making any given point easy of access and all the work has been handled by eminent authorities in this country and in Europe.

Special articles of interest are those by Arthur E. Giles, M. D., on gynæcology and obstetrics, Robt. Hutchinson, M. D., on general medicine, Priestly Leech, M. D., on general surgery and J. W. Thompson Walker, M. D., on venereal diseases. Radio-activity and electro-therapeutics form the subject of a valuable article by John MacIntyre, M. D., and Boardman Reed, M. D., of Philadelphia, the editor of the International Medical Magazine, contributes an able article on gastric disorders. A novel feature in the matter of illustration is the publishing of stereoscopic views in a number of cases, which, when viewed through the proper medium, give a better idea of the structures than is obtainable by ordinary means. In addition to these plates there are a number

of colored views, and some especially interesting and valuable cases are thus shown. The publication in its entirety bears out the reputation which it has always enjoyed.

The Perpetual Visiting and Pocket Reference Book, Including Information in Emergencies, from Standard Authors. Price, 10 Cents, for Postage. Dios Chemical Co., Publishers, St. Louis, Mo., 1904.

A handy little book for the pocket, to serve as a reminder for the busy physician. Calendars for the current year and for 1905, a list of poisons and their antidotes, a weekly visiting list, spaces for nurses' addresses, a clinical record, obstetric record and other data are provided. There is a generous space for "articles loaned," and one equally generous for "cash loaned." It is well arranged for the purpose for which it is intended.

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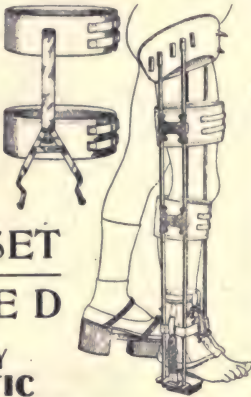
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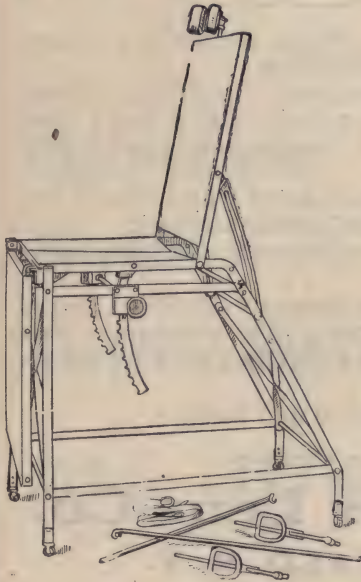
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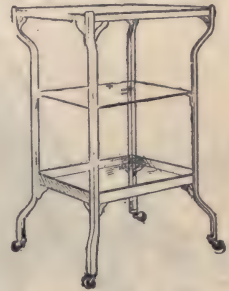


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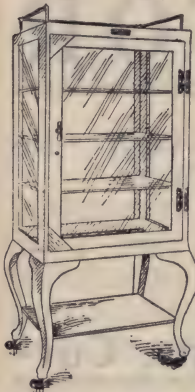
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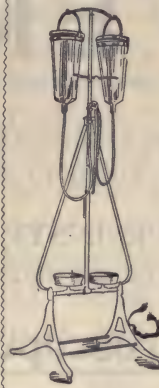
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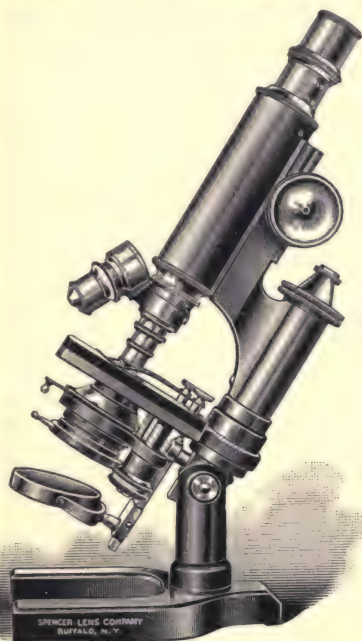
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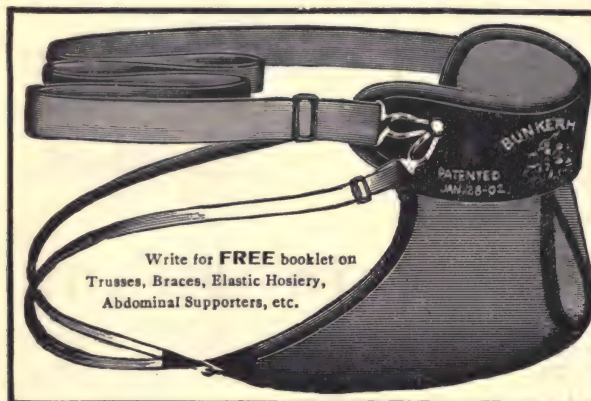
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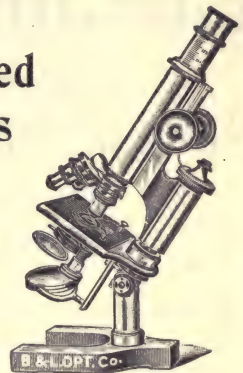
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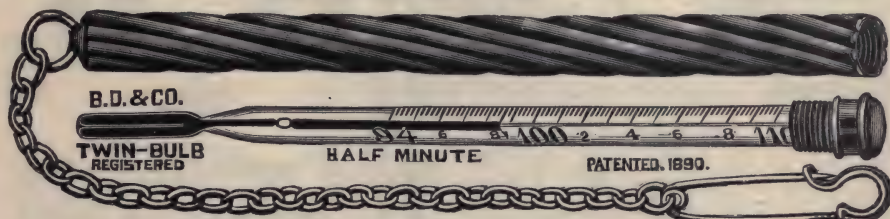
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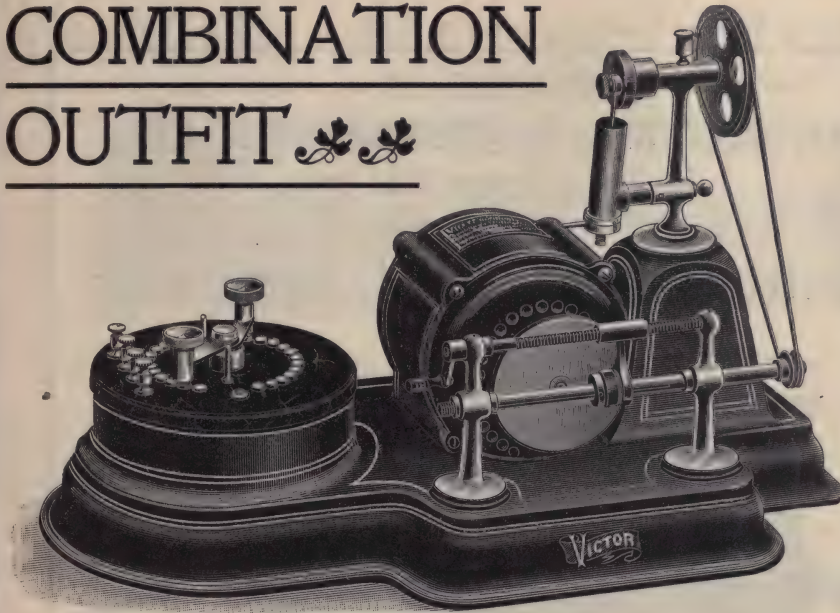
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